

EXHIBIT 3

**IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ERICSSON INC., and
TELEFONAKTIEBOLAGET LM
ERICSSON,

Plaintiffs,

v.

TCL COMMUNICATION TECHNOLOGY
HOLDINGS LTD.,
TCT MOBILE LIMITED, and
TCT MOBILE (US), INC.,

Defendants.

Case No. 2:15-cv-00011-RSP

**DEFENDANTS' INVALIDITY CONTENTIONS
PURSUANT TO PATENT RULES 3-3 AND 3-4**

Pursuant to Patent Rules 3-3 and 3-4, Defendants TCL Communication Technology Holdings Ltd., TCT Mobile Limited, and TCT Mobile (US), Inc. (collectively "TCL") hereby serve their Invalidity Contentions concerning U.S. Patent No. 6,418,310 ("the '310 patent"), U.S. Patent No. 6,029,052 ("the '052 patent"), U.S. Patent No. RE 43,931 ("the '931 patent"), U.S. Patent No. 6,535,815 ("the '815 patent"), and U.S. Patent No. 7,149,510 ("the '510 patent").

I. P.R. 3-3 INVALIDITY CONTENTIONS

Defendants' invalidity contentions reflect present knowledge and contentions, and Defendants reserve all rights to modify and supplement these contentions without prejudice, in the event that additional invalidity grounds are later identified. Defendants' contentions herein are not, and should in no way be seen as, admissions or adoptions as to any particular claim scope or construction, or as any admission that any particular element is met in any particular

way. Defendants object to any attempt to imply claim constructions from any identification of potential prior art.

Defendants' invalidity contentions, in some instances, address invalidity with respect to Ericsson Inc. and Telefonaktiebolaget LM Ericsson's (collectively, "Ericsson") improper assertions of infringement and improper applications of the claims, however, Defendants should not be considered to agree with or adopt Ericsson's improper analysis. Rather, in such instances, Defendants illustrate to the Court and Ericsson that Ericsson's patents are invalid even under Ericsson's analysis and application of claim language. Defendants do not agree with Ericsson's application of the claims, and deny infringement.

To the extent an accused product or feature comprises or is drawn from prior art, Defendants contend, without admitting any purported infringement, that the patents are anticipated and/or made obvious in light of that prior art and Ericsson's own infringement charts. Defendants' provision of these invalidity contentions is not an admission that Ericsson's infringement contentions are proper, and Defendants reserve all rights and objections with respect to refuting Ericsson's infringement contentions.

In those instances where Defendants assert that the claims are invalid under 35 U.S.C. § 112 (*e.g.*, no written description, not enabled, and/or indefinite), Defendants have applied the prior art, in part, in accordance with Defendants' assumption that Ericsson contends—(1) that those claims are definite, and (2) that the claims find written description support in, and are enabled by, the asserted patents. However, Defendants' prior art invalidity contentions do not represent Defendants' agreement or view as to the meaning, definiteness, written description support for, or enablement of, any claim contained therein, or that the patents-in-suit properly disclose structures corresponding to functions in any claims governed by 35 U.S.C. § 112(6). In fact, Defendants assert numerous grounds for invalidity on such bases, as disclosed below (*e.g.*,

to the extent Ericsson contends the claims are not invalid in view of the prior art, Defendants provide defenses under 35 U.S.C. section 112 in Part I.D, below).

Defendants reserve the right to modify, amend, and/or supplement these contentions in view of, without limitation:

- information provided by Ericsson concerning its infringement allegations;
- discovery concerning the alleged dates of priority, conception, and/or reduction to practice for any of the asserted claims;
- additional prior art obtained through discovery or further investigation, including, without limitation, discovery from Ericsson and from third parties; or
- any other basis in law or fact.

Defendants also hereby reserve the right to modify and/or make new combinations based on the cited references and/or any new references.

A. P.R. 3-3(A) THE IDENTITY OF EACH ITEM OF PRIOR ART THAT ANTICIPATES EACH ASSERTED CLAIM OR RENDERS IT OBVIOUS.

Pursuant to P.R. 3-3(a), and based on Ericsson's infringement contentions, Defendants identify prior art below and in Exhibits A through E, which contain charts disclosing the identity of each item of prior art that anticipates and/or renders obvious each asserted claim. As shown below, and in Exhibits A through E, Defendants have identified each prior art patent or application by its number, country of origin, and date of issue or publication. To the extent feasible, Defendants have identified each prior art publication by its title, date of publication, author, and publisher. Defendants note that, in some instances, Defendants have applied the prior art in accordance with Ericsson's improper assertions of infringement and improper applications of the claims. Nevertheless Defendants do not agree with Ericsson's application of the claims, and deny infringement.

As further set forth in Exhibits A through E, the following references—and any products, devices, or processes used in the prior art that embody the subject matter disclosed in the references—anticipate and/or render obvious the claims of the patents-in-suit, expressly or inherently, as detailed below and in the attached charts.

1. The ‘310 Patent

a. Prior Art Patent Documents Under 35 U.S.C. §§ 102(a), (b), (e), and/or (g)

Country of Origin, Patent No., Inventor, Date of Issue or Publication			
United States	Patent No. 6,034,963	Minami et al.	March 7, 2000
United States	Patent No. 6,065,120	Laursen et al.	May 16, 2000
United States	Patent No. 6,169,911	Wagner et al.	January 2, 2001
United States	Patent No. 6,269,254	Mathis	July 31, 2001
United States	Patent No. 6,295,289	Ionescu et al.	September 25, 2001
United States	Patent No. 6,308,317	Wilkinson et al.	October 23, 2001
United States	Patent No. 6,470,447	Lambert et al.	October 22, 2002
United States	Patent No. 6,608,637	Beaton et al.	August 19, 2003
United States	Patent No. 8,489,860	McMahon et al.	July 16, 2013
WO	Publ. No. 97/34426 A2	Keyworth et al.	September 18, 1997
WO	Publ. No. 98/19237	Wilkinson et al.	May 7, 1998
WO	Publ. No. 98/30042	Korpela	July 9, 1998

b. Prior Publications Under 35 U.S.C. §§ 102(a) and/or (b)

Author, Title, Publisher, Publication Information, Date of Publication
ETSI Secretariat, GSM 03.09 v5.1.0, August 1997
ETSI Secretariat, GSM 03.57 v1.0.2, October 1998
ETSI Secretariat, GSM 04.07 v4.3.1, February 1995
ETSI Secretariat, GSM 4.08 v5.3.0, June 1996
Java Telephony API 1.3 Specification, Sun Microsystems, Inc., June 20, 1999
Mandany, JavaOS: A Standalone Java Environment, A WhitePaper, Sun Microsystems, Inc., May 1996
Saulpaugh, “Inside the JavaOS Operating System,” Addison-Wesley, January 1999

Vijaykrishnan, Object-Oriented Architectural Support for a Java Processor, European Conference on Object-Oriented Programming 1998, 12th European Conference, July 20-24, 1998

c. Applicant Admitted Prior Art Under 35 U.S.C. §§ 102(b)

“Admissions in the specification regarding the prior art are binding on the patentee for purposes of a later inquiry into obviousness.” *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1362 (Fed. Cir. 2007); *see also, Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570 (Fed. Cir. 1988) (“A statement in the patent that something is in the prior art is binding on the applicant and patentee for determinations of anticipation and obviousness.”); *Sjolund v. Musland*, 847 F.2d 1573, 1577–79 (Fed. Cir. 1988) (The patent specification admitted that certain matter was prior art, and thus “the jury was not free to disregard [that matter]” and “must have accepted [it] as prior art, as a matter of law.”).

Examples of applicant-admitted prior art in the ‘310 patent include but are not limited to col. 1:12–51; 1:66–2:28; 3:42–5:60; Figs. 1, 2.

2. The ‘052 Patent

a. Prior Art Patent Documents Under 35 U.S.C. §§ 102(a), (b), (e), and/or (g)

Country of Origin, Patent No., Inventor, Date of Issue or Publication			
United States	Patent No. 5,579,347	Lindquist et al.	November. 26, 1996
United States	Patent No. 5,983,081	Lehtinen	November 9, 1999
United States	Patent No. 5,794,159	Portin	August 11, 1998
United States	Patent No. 5,530,929	Lindqvist et al.	June 25, 1996
United States	Patent No. 5,896,562	Heinonen	April 20, 1999
United States	Patent No. 5,739,730	Rotzoll	April 14, 1998
United States	Patent No. 6,111,911	Sanderford et al.	August 29, 2000
United States	Patent No. 4,408,351	Maurer et al.	October 4, 1983
United States	Patent No. 5,280,636	Kelley et al.	January 18, 1994
United States	Patent No. 5,914,986	Ohta et al.	June 22, 1999
United States	Patent No. 3,940,697	Morgan	February 24, 1976
Japan	Publ. No. H05-121947	Sasaki	May 18, 1993

Japan	Publ. No. S61-273005	Takayama	December 3, 1986
Japan	Publ. No. H05-160755	Sasaki	June 25, 1993
Japan	Publ. No. H07-321686	Hiroshi	December, 8, 1995
Europe	Publ. No. EP0678974A2	Vaisanen	October 25, 1995
United Kingdom	Publ. No. GB 2130826A	Rinderle	June 6, 1984

b. Prior Publications Under 35 U.S.C. §§ 102(a) and (b)

Author, Title, Publisher, Publication Information, Date of Publication
Dr.-Ing. Habil. Hans-Joachim Jentschel, Dipl.-Ing. Thomas Hanusch, Dipl.-Ing. Frieder Jehring, Dr.-Ing. Wolfram Kluge, "Multimodale Funktelefone," Ingenieur der Kommunikationstechnik 46, pp. 33-39, May 1996
Alfonso Fernandez-Duran <i>et al.</i> , "Application of zero-IF radio architecture to multistandard compatible radio systems," 6th International Conference on Radio Receivers and Associated Systems, Pub. No. 415, pp. 81-85, Sept. 26, 1995
T. Hanusch, F. Jehring, H.-j. Jentschel, W. Kluge, "Analog Baseband-IC for Dual Mode Direct Conversion Receiver," Proc. Esscirc 244-47, Sept. 17, 1996
Hiroshi Tsurumi and Tadahiko Maeda, "Design Study on a Direct Conversion Receiver front-end for 280 MHz, 900 MHz and 2.6Ghz Band Radio Communication System," IEEE 1991, 457-62
Voudouris, "Effects of Amplitude, Phase and Frequency Imperfections on the Performance of a Direct Conversion Receiver (DCR) for a Personal Communication Systems," IEEE Microwave and Guided Wave Letters, September 1993
Asad A. Abidi, "Radio-Frequency Integrated Circuits for Portable Communications," IEEE 1994 Custom Integrated Circuits Conference, pp. 151-58
Behzad Razavi, "Design Considerations for Direct-Conversion Receivers," IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing, Vol. 44, No. 6, June 1997
Behzad Razavi, "Challenges in Portable RF Transceiver Design," IEEE Circuits and Devices Magazine, Vol. 12, Issue No. 5, September 1996
G. Schultes, "A new incoherent direct conversion receiver," IEEE 1990, 668-674
A. Rofougaran, "A 1 GHz CMOS RF Front-End IC for a Direct-Conversion Wireless Receiver," IEEE Journal of Solid-State Circuits, Vol. 31, Issue No. 7, July 1996
D. Wilson <i>et al.</i> , "Integrated RF Receiver Front Ends and Frequency Synthesizers for Wireless," pp. 369-396, 1996
Asad A. Abidi, "Direct-Conversion Radio Transceivers for Digital Communications," IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, pages 1399-1410, December 1995
Peter Weger <i>et al.</i> , "Completely Integrated 1.5 GHz Direct Conversion Transceiver," IEEE 1994 Symposium on VLSI Circuits Digest of Technical Papers, pp. 135-136, 1994
M. Isberg, "Design of an Integrated Front-End for a Direct Conversion Receiver," Department of Applied Electronics, Lund University, March 1994 ("Isberg 1994")
M. Lawton and J. Waters, "The Design of Flexible Receivers for Communicating Appliances," pp. 1060-1064, April 28, 1996

Perry Mistry, "Broadband RF Solutions for PCS1900/DCS 1800," Proceedings of IEEE Southcon/96, pp. 121-125, June 25, 1996
Jonathan Min, Ahmadreza Rofougaran, Henry Samueli, Asad Abidi, "An All-CMOS Architecture for a Low-Power Frequency-Hopped 900 MHz Spread Spectrum Transceiver" IEEE 1994 Custom Integrated Circuits Conference, pp. 379-382, 1994
Asad A. Abidi, "Low-Power Radio-Frequency IC's for Portable Communications," Proceedings of the IEEE, Vol. 83, No. 4, April, 1995, pp. 544-69

3. The '931 Patent

a. Prior Art Patent Documents Under 35 U.S.C. §§ 102(a), (b), (e), and/or (g)

Country of Origin, Patent No., Inventor, Date of Issue or Publication			
United States	Patent No. 6,009,388	Iwata et. al.	December 28, 1999
United States	Patent No. 5,616,384	Allard et. al.	March 25, 1997
United States	Patent No. 5,465,401	Thompson	November 7, 1995
United States	Patent No. 6,608,637	Beaton et. al.	December 19, 2003
United States	Patent No. 5,526,422	Keen	June 11, 1996
European Union	Patent No. 796,026	Bowen	September 17, 1997
United States	Patent No. 5,543,588	Bisset et. al.	August 6, 1996
United States	Patent No. 5,452,240	Roca et. al.	September 19, 1995
United States	Patent No. 6,072,475	Van Ketwich	June 6, 2000
United States	Patent No. 5,612,719	Beernink et. al.	March 18, 1997
United States	Patent No. 6,310,610	Beaton et. al.	August 30, 2001
United States	Patent No. 5,923,861	Bertram et. al.	July 13, 1999
United States	Patent No. 5,748,185	Stephan et. al.	May 5, 1998
United States	Patent No. 5,663,748	Huffman et. al.	September 2, 1997
United States	Patent No. 5,889,236	Gillespie et. al.	March 30, 1999
United States	Patent No. 4,566,001	Moore et. al.	January 21, 1986
United States	Patent No. 6,034,688	Greenwood et. al.	March 7, 2000
United States	Patent No. 6,043,809	Holehan et. al.	March 28, 2000
United States	Patent No. 6,363,259	Larsen	March 26, 2002
United States	Patent No. 6,496,182	Wong et. al.	December 17, 2002
United States	Patent No. 5,943,052	Allen et. al.	August 24, 1999

b. Prior Publications and Devices Under 35 U.S.C. §§ 102(a) and (b)

Author, Title, Publisher, Publication Information, Date of Publication
Robb, Patent Cooperation Treaty, Publication No. WO 1997/026744, July 24, 1997
Sears et al., "A new era for touchscreen applications: High precision, dragging icons, and refined feedback", Human-Computer Interaction Laboratory, Department of Computer Science,

University of Maryland (to appear in: Advances in Human-Computer Interaction, Vol. 3, R. Hartson, D.Hix, Ed.), June 1990
Hayes, Patent Cooperation Treaty, Publication No. WO 99/34574, July 8, 1999
IBM Simon User Guide, IBM, 1994
IBM Simon Device, released 1993
Apple Newton MessagePad Handbook, Apple, 1995
Apple Newton MessagePad, released 1995
Cullen, Ann, "Getting Started with Your EO Personal Communicator," EO Publications, AT&T 1992
AT&T EO Personal Communicator, released 1993

4. The '815 Patent

a. Prior Art Patent Documents Under 35 U.S.C. §§ 102(a), (b), (e), and/or (g)

Country of Origin, Patent No., Inventor, Date of Issue or Publication			
United States	Patent No. 5,222,245	Ando et al.	June 22, 1993
United States	Patent No. 5,999,125	Kurby	December 7, 1999
United States	Patent No. 6,075,987	Camp et al.	June 13, 2000
United States	Patent No. 6,175,740	Souissi et al.	January 16, 2001
United States	Patent No. 6,313,787	King et al.	November 6, 2001
WO	Publ. No. WO99/46949	Kingdon et al.	September 16, 1999
WO	Publ. No. WO00/10028	Bloebaum et al.	February 24, 2000

b. Prior Publications and Devices Under 35 U.S.C. §§ 102(a) and (b)

Author, Title, Publisher, Publication Information, Date of Publication
Asok Chatterjee, ETSI Secretariat, SMG Tdoc 458/98, Evaluation of positioning methods and information on progress of work, June 5, 1998
Committee T1, T1P1/98-102, Digital cellular telecommunications system (Phase 2+); Location Services (LCS); Service description, Stage 1 (GSM 02.xx), June 1998
Committee T1, T1P1/98-103, Digital cellular telecommunications system (Phase 2+); Location Services (LCS); (Functional description) - Stage 2 (GSM 02.00 version 0.0.6), June 1998
Ericsson, Committee T1, T1P1.5/98-034r4, Evaluation sheet for the uplink TOA positioning method, May 29, 1998
Ericsson et al, Committee T1, T1P1.5/98-021R7, Evaluation Sheet for Enhanced Observed Time Difference (E-OTD) Method, June 3, 1998

Ericsson et al, Committee T1, T1P198-104, Evaluation Worksheet for Assisted GPS, June 3, 1998
Ericsson et al, Committee T1, T1P1.5/98-132r3, Evaluation Worksheet for Assisted GPS, June 3, 1998
Kingdon, Ericsson, Committee T1, T1P1.5/98-292r1, Location Services SWG Work plan, June 3, 1998
Lapucha, Investigation of the Real-Time Accuracy of the DGPS Method, U.S. Army Corps of Engineers Topographic Engineering Center, November 1992.
Parkinson et al, "Global Positioning System: Theory and Applications Volume II," American Institute of Aeronautics and Astronautics, 1996.
Swedberg, Ericsson's mobile location solution, Ericsson Review, December 16, 1999
Trimble Navigation Limited, Lassen-SK8 Embedded GPS Module System Designer Reference Manual, August 1997
Trimble Navigation Limited, ACE III GPS System Design Reference Manual, June 2000
Trimble Navigation Limited, Series 4000 Receiver Reference Manual, February 1995.
Trimble Navigation Limited, Series 4000 Receiver, 1997.
Zhao, Committee T1, T1P1.5/99-569r0, Simplified GPS Assistance Protocol, September 10, 1999

5. The '510 Patent

a. Prior Art Patent Documents Under 35 U.S.C. §§ 102(a), (b), (e), and/or (g)

Country of Origin, Patent No., Inventor, Date of Issue or Publication			
United States	Patent No. 8,504,479	Bader et al.	August 6, 2013
United States	Patent No. 5,825,877	Dan et al.	October 20, 1998
United States	Patent No. 6,154,741	Feldman	November 28, 2000
United States	Patent No. 7,284,124	Ginsberg	October, 16, 2007
United States	Patent No. 6,125,447	Gong	September 26, 2000
United States	Patent No. 5,889,952	Hunnicuttt et al.	March 30, 1999
United States	Patent No. 5,925,126	Hsieh	July 20, 1999
United States	Patent No. 8,387,111	Koved, et al.	February 26, 2013
United States	Patent No. 7,051,366	LaMacchia et al.	May 23, 2006
United States	Patent No. 6,317,742	Nagaratnam et al.	November 13, 2001
United States	Patent No. 6,202,147	Slaughter et al.	March 13, 2001
United States	Patent No. 7,743,407	Sprigg et al.	June 22, 2010
United States	Patent No. 6,993,760	Peev et al.	January 31, 2006
United States	Patent No. 6,481,632	Wentker. et al.	November 19, 2002

United States	Publ. No. 2004/0216147	Yanosy, et al.	October 28, 2004
United States	Publ. No. 2002/0099837	Oe et al.	July 25, 2002

b. Prior Publications Under 35 U.S.C. §§ 102(a) and (b)

Author, Title, Publisher, Publication Information, Date of Publication
Abadi, Martin, et al., "Access control subsystem and method for distributed computer system using locally cached authentication credentials", European Patent Application Publication No. EP0580350A1, filed July 14, 1993, published January 26, 1994.
Gong, Li, "Java™ Security Architecture (JDK1.2)", Sun Microsystems, Inc., U.S.A., October 1998.
Usui, Kazutoshi et al., "Design and Implementation of Java Application Environment and Software Platform for Mobile Phones", XP-001092568, Special Issue on IMT2000 Mobile Communication System (pp. 379-383), October 2001.
Oaks, Scott, "Java™ Security", O'Reilly & Associates, Inc., U.S.A., February 1999.
McGraw, G., Felton, E., "Securing Java: Getting Down to Business with Mobile Code", 2d ed. John Wiley & Sons, Inc., Wiley Computer Publishing, 1999.
Le Sommer, N. et al., "A Contract-Based Approach of Resource-constrained software deployment", Component Deployment (pp. 15-30), Springer Berlin Heidelberg, 2002.
Spencer, Ray et al., "The Flask Security Architecture: System Support for Diverse Security Policies, The USENIX Association, Proceedings of the 8 th USENIX Security Symposium", August 1999.
Lai, C. et al., "User Authentication and Authorization in the Java™ Platform", IEEE, Computer Security Applications Conference (15 th Annual, pp. 285-290), 1999.

B. P.R. 3-3(B) WHETHER EACH ITEM OF PRIOR ART ANTICIPATES EACH ASSERTED CLAIM OR RENDERS IT OBVIOUS. IF A COMBINATION OF ITEMS OF PRIOR ART MAKE A CLAIM OBVIOUS, EACH SUCH COMBINATION, AND THE MOTIVATION TO COMBINE SUCH ITEMS.

With respect to P.R. 3-3(b), Exhibits A through E identify prior art that expressly or inherently anticipates each asserted claim, or that in combination expressly or inherently renders the asserted claims obvious, under either a proper claim construction or under Ericsson's erroneous assertions and/or applications of the claims as noted above. Motivations to modify or combine references are stated in Exhibits A through E, and are provided by discussions in the cited references, the state of the art discussed in the references of Exhibits A through E, and the knowledge of one of ordinary skill in the art. One of skill in the art may consider each asserted

claim obvious in light of the applicable combinations of prior art references set forth in Exhibits A through E for several reasons. These include:

- (A) The asserted claim combines prior art elements according to known methods yield predictable results;
- (B) The asserted claim claims a structure known in the prior art that is altered by the simple substitution of one known element for another known in the field and yields predictable results;
- (C) The asserted claim claims a combination of prior art elements that does no more than they would in separate sequential operation;
- (D) The asserted claim arranges old elements with each performing an already known function, and the results are no more than one would expect from such an arrangement;
- (E) The asserted claim uses known prior art techniques to improve similar devices (methods, or products) in the same way;
- (F) The asserted claim applies a known technique to a known device (method, or product) to yield predictable results;
- (G) The asserted claim chooses from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (H) Design incentives or other market forces would prompt the use of variations on prior art in the same field of endeavor or a similar field resulting in predictable variations of the prior art to arrive at the claimed invention.
- (I) The prior art provides some teaching, suggestion, or motivation that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

(J) One of skill in the art would have been motivated to combine the cited references, because these references relate to common objectives and subject matter.

(K) The references share commonalities in terms of their general subject matter, as well as the types of equipment, products, and/or approaches used.

(L) Further, the prior art references explicitly or implicitly reference other prior art references, share common authors or inventors, were published in the same journals, presented at the same conferences, and/or were developed at common companies, schools, or organizations, which would motivate one of skill in the art to combine them.

(M) These references are within the fields of the asserted patents and are directed to similar subject matter within the respective fields.

(N) Additionally, the references, and any products, devices, or processes described in the references, existed and/or were invented in the same time period, providing further motivation for combination.

Defendants provide these disclosures without prejudice to any arguments or objections concerning the relevance of motivation to combine in connection with any invalidity contentions and specifically reserve the right to expand on these exemplary motivations to combine in their expert reports(s).

C. P.R. 3-3(C) A CHART IDENTIFYING WHERE SPECIFICALLY IN EACH ALLEGED ITEM OF PRIOR ART EACH ELEMENT OF EACH ASSERTED CLAIM IS FOUND, INCLUDING FOR EACH ELEMENT THAT SUCH PARTY CONTENDS IS GOVERNED BY 35 U.S.C. § 112(6), THE IDENTITY OF THE STRUCTURE(S), ACT(S), OR MATERIAL(S) IN EACH ITEM OF PRIOR ART THAT PERFORMS THE CLAIMED FUNCTION.

Pursuant to P.R. 3-3(c), Defendants provide Exhibits A through E. While Defendants have identified at least one citation per element or limitation for each reference identified in the charts contained in Exhibits A through E, each and every disclosure of the same element or

limitation in the same reference is not necessarily identified. In an effort to focus the issues, Defendants cite exemplary relevant portions of identified references, even where a reference may contain additional disclosure for a particular claim element or limitation. As such, Defendants reserve all rights to rely on other portions of the identified references to support their claims and/or defenses. Persons of ordinary skill in the art generally read a prior art reference as a whole and in the context of other publications and literature. Defendants may rely on uncited portions of the prior art references and on other publications and expert testimony to provide context and as aids to understanding and interpreting the portions of the prior art references that are cited, or to cite to additional support in the reference for the limitation at issue. Dependent claims include all of the limitations of the independent claim from which they directly or indirectly depend, as well as the limitations of all intervening claims; accordingly, the prior art disclosures relating to elements of dependent claims that are initially included in an independent claim or intervening dependent claim are disclosed in connection with the first claim in which that element appears. For claims having elements governed by 35 U.S.C. § 112(6), and their dependent claims/elements, the attached charts provide the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function.

Defendants may also rely on uncited portions of the prior art references, other publications, and the testimony of experts, to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain of the cited references so as to render the claims obvious. Where Defendants cite to a particular figure in a prior art reference, the citation should be understood to include the caption and description of the figure and any text relating to the figure in addition to the figure itself. Conversely, where a cited portion of text refers to a figure, the citation should be understood to include the figure as well.

D. P.R. 3-3(D) ANY GROUNDS OF INVALIDITY BASED ON INDEFINITENESS UNDER 35 U.S.C. § 112(2) OR ENABLEMENT OR WRITTEN DESCRIPTION UNDER 35 U.S.C. § 112(1) OF ANY OF THE ASSERTED CLAIMS.

Pursuant to P.R. 3-3(d), and based in part on Ericsson's infringement contentions, Defendants state as follows:¹

1. Invalidity of the '310 patent pursuant to 35 U.S.C. § 112(1-2)

Claim 1 of the '310 patent recites the element, "a read only memory (ROM) having therein both a control program in JAVA language and a JAVA interpreter program for said JAVA language[.]" The specification of the '310 patent teaches that prior art devices could only store JAVA in random access memory (RAM) and that it was purportedly unknown to use interpretive languages such as JAVA in mobile phones. (See, e.g., '310 patent at col. 1:66-2:16 ("Software that is dynamically downloaded must of course be stored during execution in Random Access Memory (RAM) as opposed to the Read-Only Memory (ROM). Thus, in the prior art usage of JAVA for downloaded programs from third parties, the JAVA program had to be downloaded into RAM."); col. 1:52-65 ("JAVA language has not been used for mobile phone control programs due to the need for efficiency in terms of memory occupancy, speed, and power consumption of the processor that are critical in low-cost, battery-operated equipment. These goals are not met by writing control software in JAVA due to the significant size of the JVM interpreter for executing JAVA bytecodes.") However, the specification of the '310 patent fails to inform one of skill in the art regarding how to create and implement a JAVA language mobile phone control program in ROM. Accordingly, Claim 1 and any claims depending therefrom are therefore invalid for failing to comply with section 112's enablement requirement.

¹Defendants contend throughout that dependent claims are invalid under 35 U.S.C. § 112 for at least the same reasons as the related independent or intervening claim(s).

Claim 1 of the '310 patent is directed to an apparatus, namely a “portable wireless communications device.” Despite claiming a portable wireless communications device, claim 1 recites several elements that improperly combine apparatus limitations with method limitations. In particular, claim 1 includes the following elements: “a) a radio transmitter, **said transmitter selectively transmitting** user information and control messages to a network station; b) a radio receiver, **said receiver selectively receiving** user information and control messages from said network station; ... “d) a man-machine interface, **said man-machine interface receiving input from a user and providing output thereto**; e) a control processor **controlling the operation of said transmitter and said receiver in response to said control messages**” Because each of these elements, individually as well as collectively, improperly combines a device limitation with a method limitation, Claim 1 is ambiguous as to whether infringement occurs when one creates a portable wireless communications device that allows the recited functions to be performed, or whether infringement occurs when the device is actually used to perform each of the recited method limitations. For example, by way of illustration, but not limitation, it is unclear whether infringement occurs only when the radio transmitter selectively transmits user information and control messages to a network station or whether it is sufficient if the radio transmitter can perform these functions. Similarly, it is unclear whether infringement occurs only when the user actually inputs information that results in the man-machine interface providing an output, or whether infringement occurs when one creates a portable wireless device with a man-machine interface that permits the user to input information that results in the man-machine interface providing an output. Accordingly, Claim 1 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

Claim 13 of the '310 patent recites the element, "a read only memory (ROM) having therein both a control program in an interpretive computer language and an interpreter program for said interpretive computer programming language[.]" The specification of the '310 patent teaches that prior art devices could only store interpretive languages, such as JAVA, in random access memory (RAM) and that it was purportedly unknown to use interpretive languages in mobile phones. (*See, e.g.*, '310 patent at col. 1:52-2:16.) However, the specification of the '310 patent fails to inform one of skill in the art regarding how to create and implement an interpretive computer language control program in ROM. Accordingly, Claim 13 and any claims depending therefrom are therefore invalid for failing to comply with section 112's enablement requirement.

Claim 13 of the '310 patent is directed to an apparatus, namely a "portable wireless communications device." Despite claiming a portable wireless communications device, Claim 13 recites several elements that improperly combine apparatus limitations with method limitations. In particular, claim 13 includes the following elements: "a) a radio transmitter, **said transmitter selectively transmitting** user information and control messages to a network station; b) a radio receiver, **said receiver selectively receiving** user information and control messages from said network station; ... d) a control processor **controlling the operation of said transmitter and said receiver in response to said control messages**" Because each of these elements, individually as well as collectively, improperly combines a device limitation with a method limitation, Claim 13 is ambiguous as to whether infringement occurs when one creates a portable wireless device that allows the recited functions to be performed, or whether infringement occurs when the device is actually used to perform each of the recited method limitations. For example, by way of illustration, but not limitation, it is unclear whether infringement occurs only when the radio transmitter selectively transmits user information and control messages to a network station or whether it is sufficient if the radio transmitter can

perform these functions. Similarly, it is unclear whether infringement occurs only when the control processor controls the operation of the transmitter and the receiver in response to the control messages, or whether infringement occurs when one creates a portable wireless device with control processor that permits control of the operation of the transmitter and receiver in response to control messages as claimed. Accordingly, Claim 13 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

Claim 17 of the '310 patent depends from claim 13 and further recites the element, "a man-machine interface, said man-machine interface receiving input from a user and providing output thereto." This element improperly combines apparatus limitations with method limitations, and Claim 17 is thus ambiguous as to whether infringement occurs only when the user actually inputs information that results in the man-machine interface providing an output, or whether infringement occurs when one creates a portable wireless device with a man-machine interface that permits the user to input information that results in the man-machine interface providing an output. Accordingly, Claim 17 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

Claims 1 and 13 include the limitations of "a) a radio transmitter, said transmitter **selectively transmitting ... control messages** to a network station; b) a radio receiver, said receiver **selectively receiving ... control messages** from said network station[.]" Further both claims require "a control processor **controlling the operation of said transmitter and said receiver in response to said control messages**" It is unclear whether infringement occurs if the control processor controls the operation of the transmitter and receiver in response to control messages either transmitted to the network station by the radio transmitter or received by the

radio receiver from the network station, or whether infringement occurs only if the control processor controls the transmitter and receiver in response to the control messages transmitted by the radio transmitter and in response to the control messages received by the radio receiver. Further, because the control processor creates the control messages transmitted by the radio transmitter to the network station, it is unclear how the control processor controls the operation of the transmitter and receiver “in response” to something it creates. Accordingly, Claims 1 and 13, and any claims depending therefrom, fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged inventions claimed therein and therefore are invalid under section 112, paragraph 2.

2. Invalidity of the ‘052 patent pursuant to 35 U.S.C. § 112(1–2)

Claim 1 of the ‘052 patent recites the element, “baseband processing means for processing the filtered in-phase and quadrature signals.” Properly construed, this limitation is a means plus function limitation under 35 U.S.C. § 112, paragraph 6. The ‘052 patent’s specification, however, fails to identify sufficient structure to perform the claimed function. Furthermore, the ‘052 patent’s specification fails to set forth how such baseband processing is accomplished, or describe the underlying circuitry necessary to accomplish such baseband processing. Accordingly, Claim 1 and any claims depending therefrom are invalid under section 112, paragraphs 1 and 2.

Claim 1 of the ‘052 patent recites the element, “receiving means for receiving communication signals in any one of a plurality of frequency bands, the received communication signals having a bandwidth[.]” Claim 13 recites the element “receiving a communication signal in any one of a plurality of frequency bands, the communication signal having a bandwidth[.]” These elements fail to reasonably inform a person of ordinary skill in the art of the scope of the

alleged invention. In particular, the phrases “receiving communication signals in any one of a plurality of frequency bands” and “receiving a communication signal in any one of a plurality of frequency bands” are ambiguous and indefinite. Similarly, the term “frequency bands” is ambiguous and indefinite. Furthermore, the phrases “the received communication signals having a bandwidth” and “the communication signal having a bandwidth” are ambiguous and indefinite. Claims 1 and 13 also recite that “the multiple-band communication receiver uses direct conversion for converting all of the received communication signals in any one of the plurality of frequency bands” and that “direct conversion is used for converting all received communication signals in any one of the plurality of frequency bands.” These claim limitations are ambiguous and indefinite. Accordingly, Claim 1 and Claim 13 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

Claim 13 of the ‘052 patent recites “mixing the band-pass filtered signal with in-phase and quadrature oscillator signals to generate an in-phase and a quadrature received signal[.]” The ‘052 patent’s specification fails to set forth how such mixing is accomplished, or describe the underlying circuitry necessary to accomplish such mixing. Accordingly, Claim 13 and any claims depending therefrom are invalid under section 112, paragraph 1.

Claim 13 of the ‘052 patent recite the elements, “amplifying the band-pass filtered signal” and “mixing the band-pass filtered signal.” The ‘052 patent’s claim language and specification fails to reasonably apprise one of skill in the art regarding the scope of these elements. Accordingly, the Claim 13 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

3. Invalidity of the ‘931 patent pursuant to 35 U.S.C. § 112(1–2)

All claims of the ‘931 patent claim “a housing” The ‘931 patent’s specification fails to provide support for this element as claimed. Accordingly, all claims of the ‘931 patent are invalid for failing to comply with section 112 paragraph 1.

Claim 1 of the ‘931 patent recites the term “a radio communications transceiver supported by the housing[.]” Neither the claims nor the specification describe how the housing supports this transceiver or provide sufficient information for one of skill in the art to reasonably determine the scope of this term. Accordingly, Claim 1 and any claims depending therefrom are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

All claims of the ‘931 patent recites the element, “output signal[.]” The ‘931 patent’s specification fails to provide support for this element. Neither the claims nor the specification describe the output signal or provide sufficient information for one of skill in the art to reasonably determine the scope of this element. Accordingly, all claims are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

Claims 1, and 30 of the ‘931 patent recites the term, “in response to moving contact[.]” Claim 16 recites the element “characterizes moving contact[.]” The ‘931 patent’s specification fails to provide support for this term. Moreover, these claim limitations were amended during the prosecution of the ‘931 reissue patent application to include a greater claim scope than any of the claims of original United States Patent No. 6,278,888 (the “‘888 patent”). Accordingly, the ‘931 patent improperly broadened of the scope of the claims over the original ‘888 patent in violation of section 251(d). Furthermore, the specification does not describe the alleged response to moving contact or provide sufficient information for one of skill in the art to reasonably determine the scope of this element. Accordingly, Claims 1, 16 and 30 and any

claims depending therefrom are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

Claim 1, 16, 30 and 64 of the '931 patent recite the term, "scrolls displayed rows along an axis of the display[.]" Claim 58 recites the element, "scrolls displayed rows of said menu selectable items along an axis of the display[.]" Neither the claims nor the specification describe how the rows are scrolled along the display or provide sufficient information for one of skill in the art to reasonably determine the scope of this element. Accordingly, Claims 1, 16, 30, 58 and 64 and any claims depending therefrom are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

Claims 30 and 64 of the '931 patent recite the terms "a housing having a front surface . . ." and "a display, supported by the housing, that displays an image at a front surface of the housing." These claim limitations are ambiguous as to which "front surface" they refer, or how both front surfaces may be integrated into a single housing. Accordingly, claims 30 and 64 are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

Claim 47 of the '931 patent recites the term "a controller, responsive to the second output signal for controlling a function of the apparatus." This claim limitation is ambiguous as to which "controller" it refers, or how an additional controller might be incorporated into the apparatus. Accordingly, claim 47 and any claims depending therefrom are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

Claim 48 of the '931 patent claims that "the second output signal is produced in response to detection of momentary contact with said second contact-sensitive transducer." Claim 49 of the '931 patent claims that "the second output signal is produced in response to detection of a predetermined number of momentary contacts with said second contact-sensitive transducer within a predetermined time interval." Neither these claims nor the specification describe how

the second contact-sensitive transducer detects momentary contact. Accordingly, Claims 48 and 49 are invalid for failing to comply with section 112 paragraphs 1 and 2.

All claims of the '931 patent recite the term, "a second mode wherein the controller is unresponsive to contact with the contact-sensitive transducer, the second mode being entered in response to input from a user." The specification fails to describe this second mode or enable one of skill in the art to make or use this second mode. Furthermore, the claim improperly combines an apparatus with a method and is ambiguous as to whether infringement occurs when one creates a system that is capable of performing in a second mode, or whether infringement occurs when the user enters input resulting in the second mode. Moreover, the claim limitation is ambiguous as to which user it refers, or how or what form of input is required. Accordingly, all claims are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

Claims 2 and 17 of the '931 patent recite the term, "the contact-sensitive surface, when the housing is held within the user's hand such that the rear surface confronts the user's palm, confronts a finger or thumb of the holding hand." Claim 35 of the '931 patent recites the term, "the step of contacting the contact-sensitive transducer with a thumb or finger of the holding hand while holding the housing in the user's hand such that the rear surface confronts the user's palm and the display projects away from the user's palm." Claims 37 and 65 of the '931 patent recite the term, "the surface of the contact-sensitive transducer, when the housing is held within the user's hand such that the rear surface confronts the user's palm, can be engaged by a finger of or other object held in the other hand of the user than the holding hand." Claims 38 and 66 recite the term, "the contact-sensitive transducer, when the housing is held within the user's hand such that the rear surface confronts the user's palm, can be engaged by a finger of or other object held in the other hand of the user than the holding hand." None of these claims, nor the specification, provides sufficient information for one of skill in the art to reasonably determine the scope of the

elements. Nor do these claim terms find written description support in the specification.

Furthermore, the claims improperly combine an apparatus with a method and are ambiguous as to whether infringement occurs when one creates a system with a housing that may be held in the manner claimed, or whether infringement occurs when a user holds the housing in the manner claimed. Moreover, the term “the holding hand” lacks antecedent basis. Accordingly, Claims 2, 17, 35, 37, 38, 65, and 66 are therefore invalid for failing to comply with section 112 paragraphs 1 and 2.

4. Invalidity of the ‘815 patent pursuant to 35 U.S.C. § 112(1–2)

Claims 1 and 17 of the ‘815 patent recite the element, “obtaining additional aiding data ...” The ‘815 patent’s specification fails to provide support for this element, including as applied by Ericsson’s assertions of infringement against the accused products. The specification fails to explain the term “obtaining” and refers only to the affirmative act of “requesting” additional data. One of skill in the art would not know with reasonable certainty whether infringement occurs in a system that obtains additional aiding data from an affirmative request, or whether infringement occurs in a system that obtains additional aiding data by simply waiting for additional data to be sent (e.g., satellite ephemeris data) from a satellite. Accordingly, Claims 1 and 17 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

Claim 1 of the ‘815 patent recites in the preamble that it is a “[m]ethod implemented by a mobile phone for determining the current position of a mobile terminal[.]” However, nowhere in the elements of the method is the step of actually determining a location set forth. Accordingly, one of skill in the art would not know with reasonable certainty whether actual determination of

location must be occur for there to be infringement. Thus, Claim 1 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

Claim 1 of the ‘815 patent is directed to “[a] method implemented by a mobile terminal for determining the current position of mobile terminal.” The claim recites four separate steps. The fourth step reads: “obtaining additional aiding data from a remote source **if said stored aiding data is insufficient** to compute said current position meeting said desired quality of service.” As a result, it is ambiguous whether claim 1 is infringed when only the first three steps of the method are performed if in the third step it is determined that the stored aiding data is sufficient to compute a current position meeting the desired quality of service, or whether claim 1 can only be infringed when it is determined in the third step that the aiding data is “insufficient” such that in the fourth step additional aiding data is obtained from a remote source. Accordingly, Claim 1 and any claims depending therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

5. Invalidity of the ‘510 patent pursuant to 35 U.S.C. § 112(1–2)

All claims of the ‘510 patent recite the term, “platform.” The ‘510 patent’s claim language and specification fails to reasonably apprise one of skill in the art regarding the scope of this term. The specification identifies both a “platform system” and a “mobile platform assembly”, and further describes the “mobile terminal platform assembly” – but not the “platform system” – as having both hardware and software components. Accordingly, the claims of the ‘510 patent fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

All claims of the ‘510 patent recite the phrase, “having at least one interface for providing access to the software services component for enabling application domain software to be installed, loaded and run in the platform.” Persons of skill in the art cannot determine whether the phrase “...for enabling application domain software to be installed, loaded and run in the platform” modifies the “interface” or the “software services.” Accordingly, the claims of the ‘510 patent fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2. Furthermore, the specification does not indicate whether the “application domain software” is installed, loaded and run in the platform through the interface or the software services component. Accordingly, the claims of the ‘510 are invalid under section 112, paragraphs 1 and 2.

Independent Claims 1, 10 and 11 of the ‘510 patent are directed to “[a] system for controlling access to a platform.” Despite claiming a system, each of these claims recites an element that improperly requires method limitations be performed in combination with the other system limitations of the claim. In particular, Claims 1 and 11 recite the element, “wherein the requesting application domain software is granted access to the software services component via the at least one interface if the request is granted,” and Claim 10 recites the element, “wherein the non-native application software is granted access to the software services component via the at least one interface if the request is granted[.]” Because each of these elements improperly combines method limitations to a system claim, it is ambiguous as to whether infringement occurs when one creates a system in which an access controller can grant a requesting application access to the software services component via the at least one interface, or whether infringement occurs only when the access controller actually grants such access to the software services component. Accordingly, Claim 1, Claim 10 and Claim 11 and any claims depending

therefrom fail to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore are invalid under section 112, paragraph 2.

Claim 1 recites the element, “access and permissions policies[.]” The specification and claims fails to describe the difference between access policies and permissions policies, to explain what constitutes access policies or permission policies, or to enable one of skill in the art to implement the claimed access policies or permission policies. Accordingly, Claim 1 and any claims depending therefrom fail the written description requirement and enablement requirement, and are invalid under section 112, paragraphs 1 and 2.

Claim 3 recites the elements, “access control collection” and “associated permission collection[.]” The specification and the claims fail to describe these elements, explain how these elements relate to the “access and permissions policies” recited in Claim 1, or to enable one of skill in the art to implement the claimed access policies or permission policies. Accordingly, Claim 3 fails the written description requirement and enablement requirement, and is invalid under section 112, paragraphs 1 and 2.

Claim 11 recites the element, “the rules and policies of the decision entity[.]” This element lacks antecedent basis. As a result, Claim 11 is indefinite for failing to apprise a person of ordinary skill in the art with reasonable certainty of the scope of the alleged invention and therefore is invalid under section 112, paragraph 2. Accordingly, Claim 11 and any claims depending therefrom are invalid under section 112, paragraph 2.

Claim 11 recites the element, “wherein such interception module includes a cache with the rules and policies of the decision entity[.]” The specification fails to provide support for a “cache with the rules and policies of the decision entity” included within the interception module, including as applied by Ericsson’s assertions of infringement against the accused products. The specification and claims also fail to explain how a software based interception

module can have a cache for holding rules and policies of the decision entity when the software based interception module has no memory component. The specification and claims also fail to describe what constitutes “the rules and policies of the decision entity.” Accordingly, Claim 11 and any claims depending therefrom fail the written description requirement and enablement requirement, and are invalid under section 112, paragraphs 1 and 2.

E. ADDITIONAL GROUNDS FOR INVALIDITY PURSUANT TO 35 U.S.C. § 101

1. Invalidity of the ‘310 patent for failure to claim patent eligible subject matter

All claims of the ‘310 patent are directed to using an interpretative computer language to run a control program. The concept of using an interpretative language to run a program is an abstract idea. This abstract idea is not meaningfully limited by the claim language, thus the claims of the ‘310 patent lack an inventive concept and fail to comply with Section 101.

2. Invalidity of the ‘815 patent for failure to claim patent eligible subject matter

All claims of the ‘815 patent are directed to a method of determining location. The method set forth in the claims is for the device to check to see if it already has enough information to sufficiently determine location, and to request more information when necessary to determine location. The concept of determining location is an abstract idea. This abstract idea is not meaningfully limited by the claim language, thus the claims of the ‘815 patent lack an inventive concept and fail to comply with Section 101.

3. Invalidity of the ‘510 patent for failure to claim patent eligible subject matter

All claims of the ‘510 patent are directed to conditional decision making to grant or deny access. The concept of conditional decision making to grant or deny access is an abstract idea.

This abstract idea is not meaningfully limited by the claim language, thus the claims of the ‘510 patent lack an inventive concept and fail to comply with Section 101.

4. Invalidity of the ‘931 patent for improperly broadening the scope of the claims more than two years after grant of the original patent

The ‘931 patent originally issued on August 21, 2001 as United States Patent No. 6,278,888. More than two years later, on March 11, 2005, Ericsson filed for reissuance of the patent. During the reissue proceedings, Ericsson improperly expanded the scope of all the claims and thus, each and every claim of the patent is invalid for being improperly broadened. For example, by way of illustration, but not limitation, Ericsson improperly broadened the scope of Claims 1 and 30 by changing the claim limitation “a contact-sensitive transducer ... which produces an output signal that characterizes contact of an object along the contact sensitive surface of the contact-sensitive transducer” to read “a contact-sensitive transducer ... which produces an output signal in response to moving contact of an object along the contact sensitive surface of the contact-sensitive transducer[.]” As each of the claims that depend from Claims 1 and 30 also include the same improperly broadened limitation, they are also invalid.

Ericsson also improperly broadened the scope of the scope of independent Claims 16 by changing the claim limitation “a contact-sensitive transducer ... which produces an output signal that characterizes contact of an object along the contact sensitive surface of the contact-sensitive transducer” to read “a contact-sensitive transducer ... that characterizes moving contact of an object along the contact sensitive surface of the contact-sensitive transducer [.] Further, because each of the claims that depend from Claims 1 and 30 also include the same improperly broadened limitation, they are also invalid. New independent claims 58 and 64 and their

corresponding dependent claims also include this very same limitation, and thus also constitute improperly broadened claims.

Ericsson also improperly broadened independent method Claim 33 by deleting the phrase “at least one of the first and second side surfaces” and replacing it with “said front surface.” As a result of this amendment, the use of a phone that has a contact-sensitive transducer with a contact-sensitive surface disposed on the front surface of the housing that characterizes contact but which had no scrolling feature would not have infringed the original ‘888 patent, but now infringes the amended Claim 33. As a result, the amendment to Claim 33 constitutes an improper broadening under Section 251(d). Further, because all of the claims that depend from Claim 33 have been improperly broadened in the same way, they are also invalid.

Ericsson has thus broadened the scope of each and every claim of the ‘931 patent in violation of Section 251(d) and rendering the entire ‘931 reissue patent invalid.

II. P.R. 3-4 DOCUMENT PRODUCTION ACCOMPANYING INVALIDITY CONTENTIONS

A. P.R. 3-4(A) SOURCE CODE, SPECIFICATIONS, SCHEMATICS, FLOW CHARTS, ARTWORK, FORMULAS, OR OTHER DOCUMENTATION SUFFICIENT TO SHOW THE OPERATION OF ANY ASPECTS OR ELEMENTS OF AN ACCUSED INSTRUMENTALITY IDENTIFIED BY THE PATENT CLAIMANT IN ITS P. R. 3-1(C) CHARTS.

Defendants have produced documents pursuant to this section when Defendants provided documents with their initial disclosures pursuant to Federal Rule of Civil Procedure 26(a). Furthermore, discovery is ongoing and Defendants are still collecting information that may be relevant to the litigation. Accordingly, Defendants reserve the right to produce additional document at a later time. Additionally, some documents may be subject to third-party

confidentiality agreements. Defendants reserve the right to produce these documents once permission has been obtained from such third parties.

B. P.R. 3-4(B) A COPY OF EACH ITEM OF PRIOR ART IDENTIFIED PURSUANT TO P. R. 3-3(A) WHICH DOES NOT APPEAR IN THE FILE HISTORY OF THE PATENT(S) AT ISSUE. TO THE EXTENT ANY SUCH ITEM IS NOT IN ENGLISH, AN ENGLISH TRANSLATION OF THE PORTION(S) RELIED UPON MUST BE PRODUCED.

Defendants have produced documents labeled TCL_ERIC_EDTX0017364 –
TCL_ERIC_EDTX0024342 pursuant to this section.

Dated: May 8, 2015

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that counsel of record who are deemed to have consented to electronic service are being served with a copy of this DEFENDANTS' INVALIDITY CONTENTIONS PURSUANT TO PATENT RULES 3-3 AND 3-4 via email on May 8, 2015.

By: /s/ Martin R. Bader
Martin R. Bader